

J.C.A.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Levin et al.
Ser. No. : 10/712,199
Filing Date : November 13, 2003
For: Control Knob with Multiple Degrees of Freedom and Force Feedback
Examiner : Not Yet Assigned
Art Unit : 2675
Atty. Docket : IMM054B

Mail Stop: **AMENDMENT**
Commissioner For Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Enclosed is a copy of Form 1449, PTO/SB/08A and Supplemental PTO/SB/08A submitted in the parent application. It is respectfully requested that the references listed on the attached forms be expressly considered by the Examiner, made of record in the application, and appear among the "References Cited" on any patent to issue therefrom. Since the IDS submitted in the parent application complied with 37 CFR 1.98, copies of the patents, publications, pending U.S. applications, and other information have not been resubmitted in this continuing application.

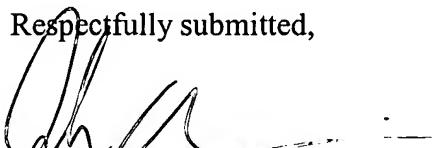
For several of the documents listed in "Other Documents," the date, which is shown on the document, is listed. Applicants make no representation as to the publication date, if any, of the document.

Applicants do not represent or admit that any document listed is prior art or material, and Applicants reserve the right to challenge any assertion that a document listed is prior art or material. Further, Applicants reserve the right to establish patentability over the listed documents.

It is respectfully requested that the references listed on the attached forms be expressly considered by the Examiner, made of record in the application, and appear among the "References Cited" on any patent to issue therefrom.

This Supplemental Information Disclosure Statement is being submitted after the mailing of a first Office Action in this application. Accordingly, enclosed please find a check in the amount of \$180 for the fees required by this action. The Commissioner is also hereby authorized to charge any additional fees under 37 C.F.R. 1.16 or 1.17 which may be required during the entire pendency of this application, or to credit any overpayment, to Deposit Account No. 16-1435. A duplicate of this sheet is attached for that purpose.

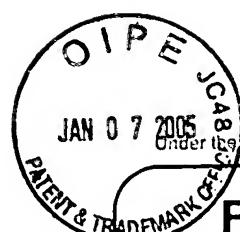
Respectfully submitted,



John C. Alemanni
Registration No. 47,384

Dated: January 5, 2005

KILPATRICK STOCKTON LLP
1001 West Fourth Street
Winston-Salem, North Carolina 27101
Telephone: (336) 607-7300
Facsimile: (336) 607-7500



FEE TRANSMITTAL for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 180.00)

Complete if Known	
Application Number	10/712,199
Filing Date	November 13, 2003
First Named Inventor	Levin et al.
Examiner Name	Not Yet Assigned
Art Unit	2675
Attorney Docket No.	IMM054B (51851/294780)

METHOD OF PAYMENT (check all that apply)

Check Credit card Money Other None
Order

Deposit Account:

Deposit Account Number 16-1435

Deposit Account Name Kilpatrick Stockton LLP

The Director is authorized to: (check all that apply)

Charge fee(s) indicated below Credit any overpayments
 Charge any additional fee(s) or any underpayment of fee(s)
 Charge fee(s) indicated below, except for the filing fee
 to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code	Fee Code	Fee (\$)	Fee (\$)
1001	2001	790 395	Utility filing fee
1002	2002	350 175	Design filing fee
1003	2003	550 275	Plant filing fee
1004	2004	790 395	Reissue filing fee
1005	2005	160 80	Provisional filing fee
SUBTOTAL (1)		(\$ 0)	

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

Total Claims	Independent Claims	Multiple Dependent	Extra Claims	Fee from below	Fee Paid
			** = 0	X 0 = 0	X 0 = 0

Large Entity	Small Entity	Fee Description
Fee Code	Fee Code	Fee (\$)
1202	2202	18 9
1201	2201	88 44
1203	2203	300 150
1204	2204	88 44
1205	2205	18 9
SUBTOTAL (2)		(\$ 0)

*or number previously paid, if greater. For Reissues, see above

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity	Small Entity	Fee Description	Fee Paid
Fee Code	Fee Code	Fee (\$)	Fee (\$)
1051	2051	130 65	Surcharge - late filing fee or oath
1052	2052	50 25	Surcharge - late provisional filing fee or cover sheet
1053	1053	130 130	Non-English specification
1812	1812	2,520 2,520	For filing a request for ex parte reexamination
1804	1804	920* 920*	Requesting publication of SIR prior to Examiner action
1805	1805	1,840* 1,840*	Requesting publication of SIR after Examiner action
1251	2251	110 55	Extension for reply within first month
1252	2252	430 215	Extension for reply within second month
1253	2253	980 490	Extension for reply within third month
1254	2254	1,530 765	Extension for reply within fourth month
1255	2255	2,080 1,040	Extension for reply within fifth month
1401	2401	340 170	Notice of Appeal
1402	2402	340 170	Filing a brief in support of an appeal
1403	2403	300 150	Request for oral hearing
1451	1451	1,510 1,510	Petition to institute a public use proceeding
1452	2452	110 55	Petition to revive - unavoidable
1453	2453	1,370 685	Petition to revive - unintentional
1501	2501	1,370 685	Utility issue fee (or reissue)
1502	2502	490 245	Design issue fee
1503	2503	660 330	Plant issue fee
1460	1460	130 130	Petitions to the Commissioner
1807	1807	50 50	Processing fee under 37 CFR 1.17 (q)
1806	1806	180 180	Submission of Information Disclosure Stmt
8021	8021	40 40	Recording each patent assignment per property (times number of properties)
1809	2809	790 395	Filing a submission after final rejection (37 CFR § 1.129(a))
1810	2810	790 395	For each additional invention to be examined (37 CFR § 1.129(b))
1801	2801	790 395	Request for Continued Examination (RCE)
1802	1802	900 900	Request for expedited examination of a design application
Other fee (specify) _____			

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 180.00)

SUBMITTED BY _____

Complete (if applicable)

Name (Print/Type) John C. Alenczuk Registration No. (Attorney/Agent) 47,384 Telephone 336-607-7311

Signature _____ Date January 5, 2005

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission	8	Attorney Docket Number	IMM054B (51851/294780)
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ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) <u> </u> <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Form 1449; PTO/SB/08A; Supplemental PTO/SB/08A; Return Postcard
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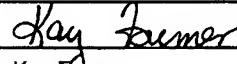
Remarks

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm	Kilpatrick Stockton LLP		
Signature			
Printed Name	John C. Alemanni		
Date	January 5, 2005	Reg. No.	47,384

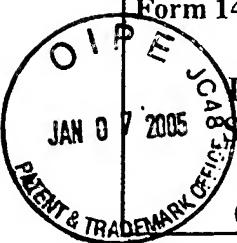
CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Signature	
Typed or printed name	Kay Farmer
Date	January 5, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>		Atty Docket No.: IMM1P054A	Application No.: 09/680,408
Applicant: Levin et al.			
Filing Date: 10/2/00		Group: 2675	

U.S. Patent Documents

Examiner Initial		Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
*		3,919,691	11/11/75	Noll	340	172.5	5/26/71
*		3,944,798	3/16/76	Eaton	235	151.3	4/18/74
*		4,050,265	9/27/77	Drennen et al.	64	11	8/3/76
*		4,125,800	11/14/78	Jones	318	681	9/2/75
*		4,131,033	12/26/78	Wright et al.	74	553	2/18/77
*		4,148,014	4/3/79	Burson	340	709	4/6/77
*		4,477,043	10/16/84	Repperger	244	223	12/15/82
*		4,560,983	12/24/85	Williams	340	825	9/17/82
*		4,654,648	3/31/87	Herrington et al.	340	710	12/17/84
*		4,706,294	11/10/87	Ouchida	381	109	6/10/86
*		4,712,101	12/8/87	Culver	340	710	12/4/84
*		4,734,685	3/29/88	Watanabe	340	710	7/18/84
*		4,782,327	11/1/88	Kley et al.	340	365	1/2/85
*		4,787,051	11/22/88	Olson	364	518	5/16/86
*		4,795,296	1/3/89	Jau	414	5	11/17/86
*		4,798,919	1/17/89	Miessler et al.	178	18	3/11/88
*		4,800,721	1/31/89	Cemenska et al.	60	393	2/13/87
*		4,811,608	3/14/89	Hilton	73	862.04	11/6/86
*		4,823,634	4/25/89	Culver	74	471	11/3/87
*		4,839,838	6/13/89	LaBiche et al.	364	709.11	3/30/87
*		4,868,549	9/19/89	Affinito et al.	340	710	5/18/87
*		4,879,556	11/7/89	Duimel	341	20	10/26/87
*		4,935,728	6/19/90	Kley	340	709	11/20/87
*		4,943,866	7/24/90	Barker et al.	358	335	6/16/89
*		4,961,138	10/20/90	Gorniak	364	200	10/2/89
*		4,961,267	10/9/90	Herzog	33	503	11/23/88
*		4,964,004	10/16/90	Barker	360	14.1	6/16/89
*		4,979,050	12/18/90	Westland et al.	360	14.1	12/2/83
*		4,983,786	1/8/91	Stevens David et al.	178	18	1/17/90
*		4,983,901	1/8/91	Lehmer	318	685	4/21/89

Examiner:	Date Considered:
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Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>		Atty Docket No.: IMM1P054A		Application No.: 09/680,408	
		Applicant: Levin et al.			
		Filing Date: 10/2/00		Group: 2675	

U.S. Patent Documents

Examiner Initial	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
*	5,007,300	4/16/91	Siva	74	471	1/22/90
*	5,044,956	9/3/91	Behensky et al.	434	45	1/12/89
*	5,095,303	03/10/92	Clark et al.	340	710	3/27/90
*	5,103,404	4/7/92	McIntosh	318	568.22	12/20/89
*	5,107,080	4/21/92	Rosen	200	6	12/1/89
*	5,116,051	5/26/92	Moncrief et al.	273	448 B	6/8/90
*	5,138,154	8/11/92	Hotelling	250	231.12	4/4/90
*	5,139,261	8/18/92	Openiano	273	148	9/18/91
*	5,143,505	9/1/92	Burdea et al.	414	5	2/26/91
*	5,146,566	9/8/92	Hollis, Jr. et al.	395	275	5/29/91
*	5,181,181	1/19/93	Glynn	364	566	9/27/90
*	5,184,319	2/2/93	Kramer	364	806	2/2/90
*	5,185,561	2/9/93	Good et al.	318	432	7/23/91
*	5,186,629	2/16/93	Rohen	434	114	8/22/91
*	5,189,355	2/23/93	Larkins et al.	318	685	4/10/92
*	5,193,963	3/16/93	McAfee et al.	414	5	10/31/90
*	5,204,600	4/20/93	Kahkoska	318	602	2/6/91
*	5,220,260	6/15/93	Schuler	318	561	10/24/91
*	5,223,776	6/29/93	Radke et al.	318	568.1	12/31/90
*	5,228,356	7/20/93	Chuang	74	471 XY	11/25/91
*	5,235,868	8/17/93	Culver	74	471	10/2/91
*	5,254,919	10/19/93	Bridges et al.	318	560	3/22/91
*	5,280,276	1/18/94	Kwok	345	167	7/10/92
*	5,296,846	3/22/94	Ledley	345	161	10/5/92
*	5,296,871	3/22/94	Paley	345	163	7/27/92
*	5,313,230	5/17/94	Venolia et al.	345	163	7/24/92
*	5,317,336	5/31/94	Hall	345	164	1/23/92
*	5,355,148	10/11/94	Anderson	345	166	1/14/93
*	5,374,942	12/20/94	Gilligan et al.	345	157	8/12/93
*	5,381,080	1/10/95	Schnell et al.	318	566	2/18/93

Examiner:	Date Considered:
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Examiner: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>		Atty Docket No.:	Application No.:
		IMM1P054A	09/680,408
		Applicant: Levin et al.	
Filing Date: 10/2/00	Group: 2675		

U.S. Patent Documents

Examiner Initial	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
*	5,389,865	2/14/95	Jacobus et al.	318	568.11	12/2/92
*	5,396,266	3/7/95	Brimhall	345	161	6/8/93
*	5,397,323	3/14/95	Taylor et al.	606	130	10/30/92
*	5,398,044	3/14/95	Hill	345	145	12/7/93
*	5,405,152	4/11/95	Katanics et al.	273	438	6/8/93
*	5,414,337	5/9/95	Schuler	318	561	6/11/93
*	5,429,140	7/4/95	Burdea et al.	128	774	6/4/93
*	5,436,638	7/25/95	Bolas et al.	345	156	12/17/93
*	5,436,640	7/25/95	Reeves	345	161	11/30/94
*	5,451,924	9/19/95	Massimino et al.	340	407.1	1/14/93
*	5,457,479	10/10/95	Cheng	345	163	6/13/94
*	5,473,344	12/5/95	Bacon et al.	345	163	1/6/94
*	5,477,237	12/19/95	Parks	345	156	7/14/94
*	5,491,477	2/13/96	Clark et al.	341	20	9/13/93
*	5,512,919	4/30/96	Araki	345	156	3/30/93
*	5,513,100	4/30/96	Parker et al.	364	167.01	6/10/93
*	5,530,455	6/25/96	Gillick et al.	345	163	8/10/94
*	5,541,379	7/30/96	Kim	200	566	1/18/95
*	5,542,672	8/6/96	Meredith	463	37	3/17/95
*	5,543,821	8/6/96	Marchis et al.	345	167	7/20/94
*	5,570,111	10/29/96	Barrett et al.	345	157	10/3/94
*	5,576,727	11/19/96	Rosenberg et al.	345	179	6/5/95
*	5,587,937	12/24/96	Massie et al.	364	578	4/25/95
*	5,589,828	12/31/96	Armstrong	341	20	3/5/92
*	5,589,854	12/31/96	Tsai	345	161	6/22/95
*	5,591,082	1/7/97	Jensen et al.	463	38	1/5/95
*	5,591,924	1/7/97	Hilton	73	862.043	4/23/93
*	5,623,582	4/22/97	Rosenberg	395	99	7/14/94
*	5,623,642	4/22/97	Katz et al.	395	500	4/6/94
*	5,625,576	4/29/97	Massie et al.	364	578	10/1/93

Examiner:	Date Considered:
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Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>		Atty Docket No.: IMM1P054A		Application No.: 09/680,408	
		Applicant: Levin et al.			
		Filing Date: 10/2/00	Group: 2675		

U.S. Patent Documents

Examiner Initial		Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
*		5,627,531	5/6/97	Posso et al.	341	22	9/30/94
*		5,629,594	5/13/97	Jacobus et al.	318	568.11	10/16/95
*		5,642,469	6/24/97	Hannaford et al.	395	99	11/3/94
*		5,643,087	7/1/97	Marcus et al.	463	38	7/29/94
*		5,656,901	8/12/97	Kurita	318	436	4/21/95
*		5,666,138	9/9/97	Culver	345	161	11/22/94
*		5,666,473	9/9/97	Wallace	345	420	10/8/92
*		5,691,747	11/25/97	Amano	345	167	12/19/94
*		5,691,898	11/25/97	Rosenberg et al.	364	190	3/28/96
*		5,709,219	1/20/98	Chen et al.	128	782	8/1/96
*		5,712,725	1/27/98	Faltermeier et al.	359	392	1/11/96
*		5,714,978	2/3/98	Yamanaka et al.	345	157	12/5/95
*		5,721,566	2/24/98	Rosenberg et al.	345	161	6/9/95
*		5,724,068	3/3/98	Sanchez et al.	345	161	9/7/95
*		5,724,106	03/03/98	Autry et al.	348	734	03/27/96
*		5,734,373	3/31/98	Rosenberg et al.	345	161	12/1/95
*		5,736,978	4/7/98	Hasser et al.	345	173	5/26/95
*		5,742,278	4/21/98	Chen et al.	345	156	11/1/95
*		5,745,057	4/28/98	Sasaki et al.	341	35	9/24/96
*		5,749,577	5/12/98	Couch et al.	273	148	5/31/95
*		5,754,023	5/19/98	Roston et al.	318	561	10/22/96
*		5,755,577	5/26/98	Gillio	434	262	7/11/96
*		5,760,764	6/2/98	Martinelli	345	160	12/13/95
*		5,767,839	6/16/98	Rosenberg	345	161	3/3/95
*		5,781,172	07/14/98	Engel et al.	345	164	6/16/97
*		5,787,152	7/28/98	Freadman	379	67	09/12/97
*		5,790,108	8/4/98	Salcudean et al.	345	184	10/23/92
*		5,805,140	9/8/98	Rosenberg et al.	345	161	11/17/95
*		5,808,568	9/15/98	Wu	341	20	3/25/97
*		5,808,603	9/15/98	Chen	345	157	2/6/97

Examiner:	Date Considered:
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Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>		Atty Docket No.:	Application No.:
		IMM1P054A	09/680,408
		Applicant: Levin et al.	
Filing Date:	Group:		
10/2/00	2675		

U.S. Patent Documents

Examiner Initial	Patent No.	Date	Patentee	Class	Sub-Class	Filing Date
*	5,823,876	10/20/98	Unbehand	463	37	5/3/96
*	5,825,308	10/20/98	Rosenberg	341	20	11/26/96
*	5,831,408	11/3/98	Jacobus et al.	318	568.11	5/12/97
*	5,841,428	11/24/98	Jaeger et al.	345	184	9/20/96
*	5,889,506	3/30/99	Lopresti et al.	345	158	10/25/96
*	5,889,670	3/30/99	Schuler et al.	364	186	1/11/96
*	5,889,672	3/30/99	Schuler et al.	364	188	6/3/98
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Form 1449 (Modified) Information Disclosure Statement By Applicant <i>(Use Several Sheets if Necessary)</i>		Atty Docket No.:	Application No.:
		IMM1P054A	09/680,408
		Applicant: Levin et al.	
Filing Date:	Group:		
10/2/00	2675		

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<i>(Use Several Sheets if Necessary)</i>		Filing Date: 10/2/00	Group: 2675

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	IMM1P054A	09/680,408
	Applicant: Levin et al.	
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Application Number	09/680,408
Filing Date	October 2, 2000
First Named Inventor	Michael D. Levin, et al.
Group Art Unit	2675
Examiner Name	Alecia D. Nelson
Attorney Docket Number	IMM054A

U.S. PATENT DOCUMENTS

Examiner	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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		Country Code ³	Number ⁴	Kind Code ⁵ (if known)			
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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Application Number	09/680,408
				Filing Date	October 2, 2000
				First Named Inventor	Michael D. LEVIN et al.
				Group Art Unit	2675
				Examiner Name	Alecia D. Nelson
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	BI	EP	EP0349086		1/31/1990	Visser	

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	BR	TADROS, "Control System Design for a Three Degree of Freedom Virtual Environment Simulator Using Motor/Brake Pair Actuators, MIT Archive© Massachusetts Institute of Technology, pp. 1-88, February 1990.
	BS	CALDWELL et al., "Enhanced Tactile Feedback (Tele-Traction) Using a Multi-Functional Sensory System," 1050-4729/93, pp. 955-960, 1993.
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	BU	GOTOW et al, "Controlled Impedance Test Apparatus for Studying Human Interpretation of Kinesthetic Feedback," WA11-11:00, pp. 332-337
	BV	STANLEY et al., "Computer Simulation of Interacting Dynamic Mechanical Systems Using Distributed Memory Parallel Processors," DSV-Vol. 42, Advances in Robotics, pp. 55-61, ASME 1992.
	BW	RUSSO, "Controlling Dissipative Magnetic Particle Brakes in Force Reflective Devices," DSC-Vol. 42, Advances in Robotics, pp. 63-70, ASME 1992.

Examiner Signature		Date Considered
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Substitute for form 1449A/PTO			<i>Complete If Known</i>		
SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Application Number	09/680,408	
			Filing Date	October 2, 2000	
			First Named Inventor	Michael D. LEVIN et al.	
			Group Art Unit	2675	
			Examiner Name	Alecia D. Nelson	
Sheet	4	of	5	Attorney Docket Number	IMM054A

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS		
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	BX	KONTARINIS et al., "Display of High-Frequency Tactile Information to Teleoperators," Telemanipulator Technology and Space Telerobotics, Won S. Kim, Editor, Proc. SPIE Vol. 2057, pp. 40-50, Sep. 7-9, 1993.
	BY	PATRICK et al., "Design and Testing of A Non-reactive, Fingertip, Tactile Display for Interaction with Remote Environments," Cooperative Intelligent Robotics in Space, Rui J. deFigueiredo et al., Editor, Proc. SPIE Vol. 1387, pp. 215-222, 1990.
	BZ	ADELSTEIN, "A Virtual Environment System For The Study of Human Arm Tremor," Ph.D. Dissertation, Dept. of Mechanical Engineering, MIT, June 1989.
	CA	BEJCZY, "Sensors, Controls, and Man-Machine Interface for Advanced Teleoperation," Science, Vol. 208, No. 4450, pp. 1327-1335, 1980.
	CB	BEJCZY, "Generalization of Bilateral Force-Reflecting Control of Manipulators," Proceedings Of Fourth CISM-IFToMM, Sep. 8-12, 1981.
	CC	MCAFFEE, "Teleoperator Subsystem/Telerobot Demonstrator: Force Reflecting Hand Controller Equipment Manual," JPL D-5172, pp. 1-50, A1-A36, B1-B5, C1-C36, January 1988.
	CD	MINSKY, "Computational Haptics: The Sandpaper System for Synthesizing Texture for a Force-Feedback Display," Ph.D. Dissertation, MIT, June 1995.
	CE	JACOBSEN et al., "High Performance, Dextrous Telerobotic Manipulator With Force Reflection," Intervention/ROV '91 Conference & Exposition, Hollywood, Florida, May 21-23, 1991.
	CF	SHIMOOGA, "Finger Force and Touch Feedback Issues in Dexterous Telemanipulation," Proceedings of Fourth Annual Conference on Intelligent Robotic Systems for Space Exploration, Rensselaer Polytechnic Institute, Sep. 30 - Oct. 1, 1992.
	CG	IBM Technical Disclosure Bulletin, "Mouse Ball-Actuating Device With Force and Tactile Feedback," Vol. 32, No. 9B, February 1990.
	CH	TERRY et al., "Tactile Feedback In A Computer Mouse," Proceedings of Fourteenth Annual Northeast Bioengineering Conference, University of New Hampshire, March 10-11, 1988.
	CI	HOWE, "A Force-Reflecting Teleoperated Hand System for the Study of Tactile Sensing in Precision Manipulation," Proceedings of the 1992 IEEE International Conference on Robotics and Automation, Nice, France, May 1992.
	CJ	EBERHARDT et al., "OMAR - A Haptic display for speech perception by deaf and deaf-blind individuals," IEEE Virtual Reality Annual International Symposium, Seattle, WA, Sep. 18-22, 1993.
	CK	RABINOWITZ et al., "Multidimensional tactile displays: Identification of vibratory intensity, frequency, and contractor area," Journal of The Acoustical Society of America, Vol. 82, No. 4, October 1987.

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	CL	BEJCZY et al., "Kinesthetic Coupling Between Operator and Remote Manipulator," International Computer Technology Conference, The American Society of Mechanical Engineers, San Francisco, CA, August 12-15, 1980.
	CM	BEJCZY et al., "A Laboratory Breadboard System For Dual-Arm Teleoperation," SOAR '89 Workshop, JSC, Houston, TX, July 25-27, 1989.
	CN	OUH-YOUNG, "A Low-Cost Force Feedback Joystick and Its Use in PC Video Games," IEEE Transactions on Consumer Electronics, Vol. 41, No. 3, August 1995.
	CO	MARCUS, "Touch Feedback in Surgery," Proceedings of Virtual Reality and Medicine The Cutting Edge, Sep. 8-11, 1994.
	CP	BEJCZY, et al., "Universal Computer Control System (UCCS) For Space Telerobots," CH2413-3/87/0000/0318501.00 1987 IEEE, 1987.
	CQ	AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129-180, 1992.
	CR	EBERHARDT et al., "Including Dynamic Haptic Perception by The Hand: System Description and Some Results," DSC-Vol. 55-1, Dynamic Systems and Control: Volume 1, ASME 1994.
	CS	GOBEL et al., "Tactile Feedback Applied to Computer Mice," International Journal of Human-Computer Interaction, Vol. 7, No. 1, pp. 1-24, 1995.
	CT	PIMENTEL et al., "Virtual Reality: through the new looking glass," 2 nd Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.
	CU	"Cyberman Technical Specification," Logitech Cyberman SWIFT Supplement, 4/5/1994.
	CV	OUHYOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95, Seoul, Korea, 21-24 August 1995.
	CW	KACZMAREK et al., "Tactile Displays," Virtual Environment Technologies.

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